WHAT IS CLAIMED IS:

1. A radio-frequency identification system comprising:

(a) a plurality of responders each of which has a unique identification number, and makes a response in radio-frequency communication to an inquiry transmitted from a later mentioned interrogator;

(b) an interrogator which makes an inquiry to each of said responders, and receives said response from each of said responders; and

(c) a host computer which controls communication made between said responders and said interrogator, and binary-searches a number space of said identification number of each of said responders for identifying a responder(s) existing in a communication area in which said responders and said interrogator can make communication with each other,

said host computer having a function of acting as a discriminator for generating a control signal in accordance with first to N-th communication areas in each of which said responders and said interrogator can make communication with each other, binary-searching said number space in each of said first to N-th communication areas one by one to identify a responder(s) existing therein, and inactivating the thus identified responder(s), wherein N is a positive integer equal to or greater than two, and said function is accomplished by software.

2. The radio-frequency identification system as set forth in claim 1, wherein said host computer binary-searches said number space in each of said first to N-th communication areas in such an order that a smaller area is selected prior to a larger area.

3. The radio-frequency identification system as set forth in claim 2, wherein said smaller area is contained in said larger area.

4. The radio-frequency identification system as set forth in claim 3, wherein said interrogator includes a power amplifier which amplifies power in accordance with said control signal to incrementally increase a level of an output signal transmitted from said interrogator.

5. The radio-frequency identification system as set forth in claim 1, wherein said interrogator includes:

a signal-transmitting antenna and a signal-receiving antenna both having directivity; and

a rotator rotating said signal-transmitting and signal-receiving antennas in accordance with said control signal for varying a communication area among said first to N-th communication areas.

6. The radio-frequency identification system as set forth in claim 1, wherein said interrogator includes:

a plurality of pairs of a signal-transmitting antenna and a signal-receiving antenna; and

a selector which selects one pair of a signal-transmitting antenna and a signal-receiving antenna among said pairs in accordance with said control signal for varying a communication area among said first to N-th communication areas.

7. The radio-frequency identification system as set forth in claim 1, wherein said radio-frequency identification system includes a plurality of interrogators, and further includes a selector which selects one of said interrogators in accordance with said control signal for varying a communication area among said first to N-th communication areas.

8. A method of carrying out radio-frequency identification in a radio-frequency identification system comprising:

(A) a plurality of responders each of which has a unique identification number, and makes a response in radio-frequency communication to an inquiry transmitted from a later mentioned interrogator;

(B) an interrogator which makes an inquiry to each of said responders, and receives said response from each of said responders; and

(C) a host computer which controls communication made between said responders and said interrogator, and binary-searches a number space of said identification number of each of said responders for identifying a responder(s) existing in a communication area in which said responders and said interrogator can make communication with each other,

said method including the steps of:

(a) generating a control signal in accordance with first to N-th communication areas in each of which said responders and said interrogator can make communication with each other, wherein N is a positive integer equal to or greater than two;

(b) binary-searching said number space in each of said first to N-th communication areas one by one to identify a responder(s) existing therein; and

(c) inactivating the thus identified responder(s),

wherein said steps (a), (b) and (c) are carried out by said host computer.

9. The method as set forth in claim 8, wherein said step (b) is carried out in such an order that a smaller area is selected prior to a larger area.

10. The method as set forth in claim 9, wherein said smaller area is contained in said larger area.

11. The method as set forth in claim 10, further including the step of amplifying power in accordance with said control signal to incrementally increase a level of an output signal transmitted from said interrogator.

12. The method as set forth in claim 8, wherein said step (b) is carried out by rotating a signal-transmitting antenna and a signal-receiving antenna of said interrogator in accordance with said control signal for varying a communication area among said first to N-th communication areas, said both signal-transmitting and signal-receiving antennas having directivity.

13. The method as set forth in claim 8, wherein said step (b) is carried out by selecting one pair of a signal-transmitting antenna and a signal-receiving antenna among a plurality of pairs of a signal-transmitting antenna and a signal-receiving antenna of said interrogator in accordance with said control signal for varying a communication area among said first to N-th communication areas.

14. The method as set forth in claim 8, wherein said radio-frequency identification system includes a plurality of interrogators, and said step (b) is carried out by selecting one of said interrogators in accordance with said control signal for varying a communication area among said first to N-th communication areas.

15. The method as set forth in claim 8, further including:

(d-1) initializing said control signal for initializing said first to N-th communication areas;

(d-2) initializing binary-search conditions in accordance with which said number space is binary-searched, to turn all of bits into indefinite bits, and designating all of number spaces;

(d-3) causing said interrogator to transmit an inquiry made in accordance with said binary-search conditions, to said responders;

(d-4) causing said interrogator to receive a response(s) from a responder(s)

having a unique identification number matching to said binary-search conditions;

(d-5) judging whether response numbers having been received in said interrogator are in collision with one another;

(d-6) storing a response number which is not in collision with other response numbers, as an identification number of a responder existing in a communication area in which said responders and said interrogator can make communication with each other;

(d-7) transmitting an instruction to said responder to inactivate said responder;

(d-8) judging whether binary-searching said number space is completed in accordance with said binary-search conditions;

(d-9) if binary-searching said number space is judged in said step (k) to be completed, judging whether binary-searching said number space is completed in all of said first to N-th communication areas; and

(d-10) if binary-searching said number space is judged completed in all of said first to N-th communication areas, finishing binary-searching said number space.

16. The method as set forth in claim 15, further including:

(e) if said response numbers are judged in said step (d-5) to be in collision with one another, resetting a bit which is in collision with a bit in another response number, into another binary number without resetting a bit which is not in collision with a bit in another response number; and

(f) repeating said steps (d-3) to (d-10).

17. The method as set forth in claim 15, further including:

(g) if binary-searching said number space is judged in said step (d-8) not to be completed, resetting a bit which is in collision with a bit in another response number, into another binary number without resetting a bit which is not in

collision with a bit in another response number; and

(h) repeating said steps (d-3) to (d-10).

18. The method as set forth in claim 15, further including:

(i) if binary-searching said number space is judged in said step (d-9) not to be completed in all of said first to N-th communication areas, varying said control signal for selecting another area among said first to N-th communication areas; and

(j) repeating said steps (d-2) to (d-10).

19. A program for causing a computer to control communication made between each of a plurality of responders each of which has a unique identification number, and makes a response in radio-frequency communication to an inquiry transmitted from a later mentioned interrogator, and an interrogator which makes an inquiry to each of said responders, and receives said response from each of said responders, and binary-search a number space of said identification number of each of said responders for identifying a responder(s) existing in a communication area in which said responders and said interrogator can make communication with each other,

wherein steps executed by said computer in accordance with said program includes:

(a) generating a control signal in accordance with first to N-th communication areas in each of which said responders and said interrogator can make communication with each other, wherein N is a positive integer equal to or greater than two;

(b) binary-searching said number space in each of said first to N-th communication areas one by one to identify a responder(s) existing therein; and

(c) inactivating the thus identified responder(s).

20. The program as set forth in claim 19, wherein said step (b) is carried out in such an order that a smaller area is selected prior to a larger area.

21. The program as set forth in claim 20, wherein said smaller area is contained in said larger area.

22. The program as set forth in claim 21, wherein said steps executed by said computer in accordance with said program further includes amplifying power in accordance with said control signal to incrementally increase a level of an output signal transmitted from said interrogator.

23. The program as set forth in claim 19, wherein said step (b) is carried out by rotating a signal-transmitting antenna and a signal-receiving antenna of said interrogator in accordance with said control signal for varying a communication area among said first to N-th communication areas, said both signal-transmitting and signal-receiving antennas having directivity.

24. The program as set forth in claim 19, wherein said step (b) is carried out by selecting one pair of a signal-transmitting antenna and a signal-receiving antenna among a plurality of pairs of a signal-transmitting antenna and a signal-receiving antenna of said interrogator in accordance with said control signal for varying a communication area among said first to N-th communication areas.

25. The program as set forth in claim 19, wherein said step (b) is carried out by selecting one of said interrogators in accordance with said control signal for varying a communication area among said first to N-th communication areas.

26. The program as set forth in claim 19, wherein said steps executed by

said computer in accordance with said program further includes:

(d-1) initializing said control signal for initializing said first to N-th communication areas;

(d-2) initializing binary-search conditions in accordance with which said number space is binary-searched, to turn all of bits into indefinite bits, and designating all of number spaces;

(d-3) causing said interrogator to transmit an inquiry made in accordance with said binary-search conditions, to said responders;

(d-4) causing said interrogator to receive a response(s) from a responder(s) having a unique identification number matching to said binary-search conditions;

(d-5) judging whether response numbers having been received in said interrogator are in collision with one another;

(d-6) storing a response number which is not in collision with other response numbers, as an identification number of a responder existing in a communication area in which said responders and said interrogator can make communication with each other;

(d-7) transmitting an instruction to said responder to inactivate said responder;

(d-8) judging whether binary-searching said number space is completed in accordance with said binary-search conditions;

(d-9) if binary-searching said number space is judged in said step (k) to be completed, judging whether binary-searching said number space is completed in all of said first to N-th communication areas; and

(d-10) if binary-searching said number space is judged completed in all of said first to N-th communication areas, finishing binary-searching said number space.

27. The program as set forth in claim 26, wherein said steps executed by said computer in accordance with said program further includes:

(e) if said response numbers are judged in said step (d-5) to be in collision with one another, resetting a bit which is in collision with a bit in another response number, into another binary number without resetting a bit which is not in collision with a bit in another response number; and

(f) repeating said steps (d-3) to (d-10).

28. The program as set forth in claim 26, wherein said steps executed by said computer in accordance with said program further includes:

(g) if binary-searching said number space is judged in said step (d-8) not to be completed, resetting a bit which is in collision with a bit in another response number, into another binary number without resetting a bit which is not in collision with a bit in another response number; and

(h) repeating said steps (d-3) to (d-10).

29. The program as set forth in claim 26, wherein said steps executed by said computer in accordance with said program further includes:

(i) if binary-searching said number space is judged in said step (d-9) not to be completed in all of said first to N-th communication areas, varying said control signal for selecting another area among said first to N-th communication areas; and

(j) repeating said steps (d-2) to (d-10).